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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/620,177

07/20/2000

James W. Shade

CTH / 108

3895

26875

7590

12/30/2004

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EXAMINER

KING, BRADLEY T

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/620,177

Applicant(s)

SHADE ET AL.

Examiner

Bradley T King

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6-8,10-14,18-21,23-25,27-31 and 33-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 6-8 10-14 18-21 23-25 27-31 33-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/16/2004 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 7-8, 10, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Perkins (US# 1829236).

Perkins discloses a pipe coupling having a generally cylindrical metal sleeve (figure 2), having first and second sides, at least one rigid and radially inwardly directed annular corrugation on the first side of the sleeve being adapted to cooperatively

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engage the annular corrugation on the first pipe section end, said annular corrugation being located adjacent a free end of said sleeve on a first side thereof, and a bell 21 on the second side being adapted to slidably receive in an axial direction the second pipe section end within the sleeve, with no portion of said sleeve extending radially inwardly between said annular corrugation and said bell so that the first and second pipe section ends are capable of abutting (see figure 4). Perkins discloses the sleeve as being split (column 1, line 56). The method limitation of the sleeve being formed from a flat sheet fails to further structurally define the coupling over that of Perkins.

Regarding claim 10, Perkins discloses a gasket 25.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6-8, 10-14, 18-20, and 25, 27-31, 33-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claes et al (US#5326138).

Claes et al disclose a pipe coupling having a generally cylindrical sleeve C, having first and second sides, at least one rigid and radially inwardly directed annular corrugation 10 on the first side of the sleeve being adapted to cooperatively engage the

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annular corrugation on the first pipe section end, and a bell on the second side being adapted to slidably receive in an axial direction the second pipe section end within the sleeve, with no portion of said sleeve extending radially inwardly between said annular corrugation and said bell so that the first and second pipe section ends are capable of abutting. Claes et al lack the disclosure of the coupling being made of metal. Material selection is well known in the art, and both plastic and metal are known as suitable equivalents. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device of Claes et al from metal to simplify manufacture and decrease the cost of the device. Note the instant specification discloses both metal and plastic as preferred materials, and *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Claes et al also lack forming the sleeve from a flat sheet. It is well known in the art to form couplings from sheet material. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the coupling of Claes et al from a flat sheet as an obvious manufacturing process allowing the use of inexpensive sheet material, reducing the costs of the device.

Regarding claims 1 and 8, see figure 1.

Regarding claims 25 and 31, Claes et al disclose a radially inwardly directed annular projection 44 (see figure 7).

Regarding claim 12, Claes et al disclose a fluted gasket 30.

Regarding claims 20 and 41, Claes et al disclose all the limitations of the instant claims with exception to sealant. The use of sealant is well known in the art to provide a

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fluid tight connection. It would have been obvious to one of ordinary skill in the art to utilize sealant in the connection of Claes et al to further increase the sealing capabilities of the connection.

Regarding claims 14 and 36, Claes et al lack a flat gasket, instead, showing a fluted gasket. Flat gaskets are well known in the art. It would have been obvious to one of ordinary skill in the art to utilize a flat gasket in place of the fluted gasket of Claes et al as an obvious alternate means for providing the seal.

Claims 6, 18, 20-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins (US#1829236).

Regarding claims 6 and 18, Perkins discloses all the limitations of the instant claims with exception to an outwardly extending flange on the bell. Flanges are well known in the art to aid in the assembly of couplings. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an outwardly extending flange on the bell of Perkins to aid in the assembly of the device.

Regarding claim 20, Perkins discloses all the limitations of the instant claim with exception to sealant on the first side of the sleeve. Perkins suggest the use of sealant in one embodiment (column 3, lines 17-20) to reliably seal the joint. It would have been obvious to one of ordinary skill in the art at the time the invention was made to further include sealant in the embodiment of figure 2 as taught in the embodiment of figure 3 to further seal and secure the joint.

Regarding claim 21, and 23-24, Perkins discloses all the limitations of the instant claim with exception to the method steps of forming the coupling from a flat sheet and wrapping the sheet around the first pipe to secure it. Perkins disclose forming the coupling of metal and that it may be split. It would have been obvious to one of ordinary skill in the art at the time the invention was made to form the split coupling from sheet material and further wrap it around the pipe end as an obvious means of assembly of the pipes and coupling.

Response to Arguments

Applicant's arguments filed 8/16/2004 have been fully considered but they are not persuasive.

The new limitations broadly recite that the no portion of the sleeve extends radially inwardly between the annular corrugation and the bell (met by both references, element 10 of Claes is taken to be the corrugation) first and second pipe section ends are "capable" of abutting. It is maintained that the couplings of Perkins and Claes et al meet this limitation as broadly recited. Also note that claims 1, 6-7, 25, and 27-30 do not positively recite the pipe sections. The couplings of Perkins and Claes et al are capable of use with smaller or differently configured pipe sections which can abut.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T King whose telephone number is (703) 308-8346. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (703) 308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BTK

Robert A. Sicomolfi 12/27/04
ROBERT A. SICOMOLFI
PATENT EXAMINER